CONTENTS

AMERICAN ASSOCIATION OF ECONOMIC ENTOMOLOGISTS—Proceedings for 1942; Annual Reports of the Secretary and Standing Committees.....(Feb.) 156

CURRENT NOTES.....32, 58, 66, 81, 127, 139, 204, 214, 215, 235, 240, 247, 252, 262, 272, 285, 319, 354, 375, 404, 429, 434, 444, 492, 646

EASTERN BRANCH, AMERICAN ASSOCIATION OF ECONOMIC ENTOMOLOGISTS—Proceedings of the Fourteenth Annual Meeting at New York, N. Y., November 19 and 20, 1942.. .....(Apr.) 363

HORTICULTURAL INSPECTION NOTES.....139, 432

LIST OF ENTOMOLOGISTS IN THE ARMED FORCES, PUBLIC HEALTH SERVICES AND OTHER FIELDS OF WAR EFFORT.....(Feb.) 146

NOTES.....(Apr.) 360

OBITUARIES (Unsigned).....(Apr.) 204, 247

OFFICIAL ROSTER.....(Feb.) 175

REPORT OF THE COMMITTEE ON COORDINATION OF ENTOMOLOGY WITH THE WAR EFFORT.. .....(Feb.) 132, 135

REPORT OF SPECIAL COMMITTEE ON THE INSECTICIDE SUPPLY SITUATION.....(Feb.) 137

SERVICE NOTES.....141, 487

ALEXANDER, C. C., and F. W. CARLSON, A Comparison of Codling Moth Captures by Bait Trap and Rotary Net..... .....(Sci. Note, Aug.) 637

ALLEN, H. W., and M. H. BRUNSON, The Effect of Proximity to Apple on the Extent of Oriental Fruit Moth Injury to Peach Orchards.....(Dec.) 879

ALLEN, NORMAN, and H. N. POLLARD, Damage to Tobacco by a Local Outbreak of *Heliothis armigera* and Some Control Methods Employed.....(Sci. Note, Aug.) 635

ALLEN, NORMAN, CHARLES E. SMITH and O. A. NELSON, Some Chemotropic Studies with *Autographa* spp.....(Aug.) 619

AMBRUSTER, HOWARD W., Arsenate of Iron .....(Sci. Note, Oct.) 798

ANDERSON, LAUREN D., and HARRY G. WALKER, Control of Aphids and Diamond-Back Moth Larvae on Collards with Rotenone-Nicotine Dusts.....(Sci. Note, Apr.) 343

ANDERSON, LAUREN D., and HARRY G. WALKER, Pea Aphid Control in Eastern Virginia in 1942.....(Apr.) 281

ANNAND, P. N., Annual Meetings for 1943.. .....(Editorial, Oct.) 808

ANNAND, P. N., Entomological Problems Imposed by War Conditions.....(Apr.) 193

ANON., "The Genus *Conotrachelus* Dejean in the North Central United States"..... .....(Review, Feb.) 131

APPLE, J. W., and NEALE F. HOWARD, Toxicity of Cube-Vegetable Oil Dusts to Two Species of Aphids.....(Feb.) 59

ARNOLD, C. H., and L. F. STEINER, Influence of Changes in Relative Humidity on the Effect of Certain Insecticides on Newly Hatched Codling Moth Larvae..... .....(Sci. Note, Feb.) 117

ARNOLD, C. H., L. F. STEINER and J. E. FAHEY, Soybean Phosphatides as Deposit-Builders in Nicotine Bentonite and Lead Arsenate Spray Mixtures for Control of the Codling Moth.....(Feb.) 70

ARNOLD, C. H., L. F. STEINER and J. E. FAHEY, Tests of Mississippi Bentonites in Tank-mix Nicotine Bentonite Sprays for Control of the Codling Moth..... .....(Sci. Note, Apr.) 338

ATKESON, F. W., O. A. SHAW, H. C. FRYER, ROGER C. SMITH and A. RUSSELL BORGMANN, Techniques for Conducting Fly-Repellency Tests on Cattle.....(Feb.) 33

ATKESON, F. W., ROGER C. SMITH, A. O. SHAW, H. C. FRYER, A. RUSSELL BORGMANN and F. J. HOLMES, Tests of Fly Repellents of Known Ingredients and of Selected Commercial Sprays on Dairy Cattle .....(Feb.) 23

AVENS, A. W., G. W. PEARCE and P. J. CHAPMAN, Relation of Composition to the Efficiency of Foliage or Summer Type Petroleum Fractions.....(Apr.) 241

BACK, RICHARD C., and CARL B. HUFFAKER, A Study of Methods of Sampling Mosquito Populations.....(Aug.) 561

BAILEY, JOHN S., and ARTHUR I. BOURNE, An Unusual Type of Ethylene Dichloride Injury to Peach.....(Sci. Note, June) 470

BAILEY, S. F., and H. H. KEIFER, The Tomato Russet Mite, *Phyllocoptes destructor* Keifer: Its Present Status.....(Oct.) 706

BAKER, EDWARD W., Survival Periods for Eggs of *Anastrepha ludens* (Loew) During Vapor-Heat Sterilization..(Sci. Note, Feb.) 124

BAKER, F. E., W. E. FLEMING and L. KOBLITSKY, Effect of Lead Arsenate in Soil on Vegetables.....(Apr.) 231

BAKER, HOWARD, Orchard Tests of Chemically Treated Bands for Codling Moth Control in the Missouri River Valley.....(Oct.) 760

BARBER, G. W., Injury to Leaves of Sweet Corn by the Leafhopper *Dikraneura carneola* (Stål).....(Sci. Note, Feb.) 123

BARBER, G. W., Oviposition Habits of the Earworm Moth in Relation to Infestation in the Ears and to Control.....(Aug.) 611

BARBER, G. W., Partial Replacement of Pyrethrins by Dichloroethyl Ether in Oil for Control of Corn Earworm..(Sci. Note, June) 481

BARBER, G. W., Styrene Dibromide as a Substitute for Pyrethrum in Oil for Corn Earworm Control.....(Sci. Note, Apr.) 330

BARNES, DWIGHT F., Influence of Moth-Trapping Methods on the Proportion of Females in the Catches.....(Sci. Note, Feb.) 119

BARNHART, CLYDE S., A Pattern of Thrips Feeding Recorded.....(Sci. Note, June) 476

BARTHEL, W. F., and C. V. BOWEN, Nornicotine in Commercial Nicotine Sulfate Solutions.....(Sci. Note, Aug.) 627

BATEN, WILLIAM DOWELL, and RAY HUTSON, Precautions Necessary in Estimating Populations of Small Animals.....(Aug.) 501

BEAL, J. A., and K. B. MCCLINTICK, The Pales Weevil in Southern Pines.....(Oct.) 792

BIBBY, F. F., and J. P. SECREST, Sodium Fluoride as an Ant Control..(Sci. Note, Aug.) 515

BIGGER, J. H., and R. B. MARCH, Rearing Southern Corn Rootworms on Seedling Corn Plants.....(Sci. Note, Apr.) 349

BISSELL, THEODORE L., The Confused Flour Beetle Living in Bait Mixtures Containing Cryolite.....(Sci. Note, Aug.) 634

BOBB, M. L., J. A. COX and W. S. HOUGH, A Fungous Disease of the Comstock Mealybug.....(Aug.) 580
BOHART, RICHARD M., Calcium Cyanide Fumigation for the Western Thrips..(June) 442
BORGMANN, A. RUSSELL, H. C. FRYER, A. O. SHAW, F. W. ATKESON and ROGER C. SMITH, Techniques for Conducting Fly-Repellency Tests on Cattle.....(Feb.) 33
BORGMANN, A. RUSSELL, ROGER C. SMITH, A. O. SHAW, F. W. ATKESON, H. C. FRYER and F. J. HOLMES, Tests of Fly Repellents of Known Ingredients and of Selected Commercial Sprays on Dairy Cattle.....(Feb.) 23
BOURNE, ARTHUR I., and JOHN S. BAILEY, An Unusual Type of Ethylene Dichloride Injury to Peach.....(Sci. Note, June) 470
BOWEN, C. V., and W. F. BARTHEL, Nornicotine in Commercial Nicotine Sulfate Solutions.....(Sci. Note, Aug.) 627
BRADLEY, G. H., and BERNARD V. TRAVIS, Time-Saving Methods for Handling Mosquito Light-Trap Collections.....(Feb.) 51
BRADLEY, G. H., and BERNARD V. TRAVIS, The Distribution of *Aedes* Mosquito Eggs on Salt Marshes in Florida.....(Feb.) 45
BRANNON, LOYD W., The Comparative Suitability of Potato and Tobacco as Hosts of the Potato-Tuber Worm..(Sci. Note, June) 469
BRANNON, LOYD W., and W. D. REED, A Survey of Tobacco Carriers for Stored-Tobacco Pests.....(Apr.) 295
BROADBENT, B. M., and A. W. CRESSMAN, Effectiveness of Cube and Derris in a Tank Mix and an Emulsive Oil Against California Red Scale.....(June) 439
BROMLEY, S. W., and E. P. FELT, Shade Tree Insects and Protective Concealment in Military Areas.....(Sci. Note, Apr.) 326
BRUBAKER, ROSS W., and P. K. HARRISON, Relative Abundance of Cabbage Caterpillars on Cole Crops Grown Under Similar Conditions.....(Aug.) 589
BRUBAKER, ROSS W., and W. D. REED, Fumigation of Tobacco at Reduced Pressures.....(Apr.) 300
BRUNSON, M. H., and H. W. ALLEN, The Effect of Proximity to Apple on the Extent of Oriental Fruit Moth Injury in Peach Orchards.....(Dec.) 879
BURGESS, A. F., Ephraim Porter Felt, 1868–1943.....(Obituary, Dec.) 950
BURGESS, A. F., Lester E. Gibson, 1889–1942.....(Obituary, Feb.) 130
BURGESS, EMORY D., ROBERT D. CHISHOLM and ARTHUR C. MASON, Ethylene Dichloride Treatments for the Immature Stages of the Japanese Beetle.....(Oct.) 734
BUSBEY, R. L., L. B. HOWARD and ROBERT A. FULTON, Adherence and Retention of Sulfur on Citrus Foliage.....(Aug.) 516
BUSBEY, R. L., HOWARD D. NELSON and HAROLD R. YUST, Influence of Inbreeding on the Susceptibility of the California Red Scale to HCN.....(Sci. Note, Apr.) 352
BUSBEY, R. L., and ROBERT A. FULTON, Apparatus for Laboratory Fumigation of the California Red Scale.....(Sci. Note, Aug.) 628
BUSBEY, R. L., HOWARD D. NELSON and HAROLD R. YUST, Comparative Susceptibility of Two Strains of California Red Scale to HCN, with Special Reference to Inheritance of Resistance.....(Oct.) 744
BUSBEY, R. L., and HAROLD R. YUST, Influence of Moisture and Field Dust on the Susceptibility of the California Red Scale to HCN.....(June) 457
BUSBEY, R. L., HAROLD R. YUST and HOWARD D. NELSON, Influence of Decreasing, Constant and Increasing Concentrations on Results of Fumigation of the California Red Scale with HCN.....(Dec.) 875
BUSBEY, R. L., HAROLD R. YUST, and HOWARD D. NELSON, The Influence of Repeated Fumigation with HCN on the Susceptibility of the California Red Scale.....(Dec.) 872

CALHOUN, S. L., J. C. CLARK and E. W. DUNNAM, Effect of the Removal of Squares on the Yield of Upland Cotton.....(Dec.) 896
CALLENBACH, J. A., and T. R. CHAMBERLIN, Oviposition of June Beetles and the Survival of Their Offspring in Grasses and Legumes.....(Oct.) 681
CALLENBACH, J. A., T. R. CHAMBERLIN and C. L. FLUKE, Species, Distribution, Flight and Host Preferences of June Beetles in Wisconsin.....(Oct.) 674
CAMPBELL, F. L., and BASIL G. MARKOS, Effect of Host Plant on the Susceptibility of the Southern Armyworm to Calcium Arsenate.....(Oct.) 662
CAMPBELL, ROY E., and JOHN C. ELMORE, Aphid Increase and Plant Injury Following the Use of Calcium Arsenate on Peppers..(Dec.) 853
CARLSON, F. W., and C. C. ALEXANDER, A Comparison of Codling Moth Captures by Bait Trap and Rotary Net.....(Sci. Note, Aug.) 637
CARLSON, F. W., M. A. YOTHERS and C. C. CASSIL, Tests of 4, 6-Dinitro-0-Cresol Emulsion Against Overwintering Codling Moth Larvae.....(Dec.) 882
CARTER, R. H., H. D. MANN and C. M. SMITH, The Chemical Nature of Copper-Arsenic Insecticides.....(Sci. Note, Dec.) 941
CARTER, STANLEY W., and CHARLES A. CLARK, The Collection, Rearing and Release of Parasites of the European Corn Borer in 1942.....(Sci. Note, Feb.) 120
CASSIL, C. C., F. W. CARLSON and M. A. YOTHERS, Tests of 4, 6-Dinitro-o-Cresol Emulsion Against Overwintering Codling Moth Larvae.....(Dec.) 882
CASSIL, C. C., F. M. WADLEY and F. P. DEAN, Sampling Studies on Orchard Spray Residues in the Pacific Northwest .....(Apr.) 227
CHAMBERLIN, T. R., and J. A. CALLENBACH, Oviposition of June Beetles and the Survival of Their Offspring in Grasses and Legumes.....(Oct.) 681
CHAMBERLIN, T. R., and C. L. FLUKE, DN Sulfur Dust Appears Effective Against the Sweetclover Weevil.....(Sci. Note, Oct.) 797
CHAMBERLIN, T. R., C. L. FLUKE and J. A. CALLENBACH, Species, Distribution, Flight and Host Preferences of June Beetles in Wisconsin.....(Oct.) 674
CHAMBERLIN, T. R., and L. P. ROCKWOOD, The Western Spotted Cucumber Beetle as a Pest of Forage Crops in the Pacific Northwest.....(Dec.) 837
CHAPMAN, P. J., J. G. PEARCE and A. W. AVENS, Relation of Composition to the Efficiency of Foliage or Summer Type Petroleum Fractions.....(Apr.) 241
CHISHOLM, ROBERT D., and L. KOBLITSKY, Sorption of Methyl Bromide by Soil in a Fumigation Chamber.....(Aug.) 549
CHISHOLM, ROBERT D., ARTHUR C. MASON and EMORY D. BURGESS, Ethylene Di-

chloride Treatments for the Immature Stages of the Japanese Beetle.....(Oct.) 734
CLARK, CHARLES A., and STANLEY W. CARTER, The Collection, Rearing and Release of Parasites of the European Corn-Borer in 1942.....(Sci. Note, Feb.) 120
CLARK, J. C., E. W. DUNNAM and S. L. CALHOUN, Effect of the Removal of Squares on Yield of Upland Cotton.....(Dec.) 896
CLARKE, J. LYELL, Studies of the Flight Range of Mosquitoes.....(Sci. Note, Feb.) 121
COCKERHAM, K. L., The Host Preference of the Sweetpotato Weevil..(Sci. Note, June) 471
COLE, MOSES M., and CARROLL N. SMITH, Studies of Parasites of the American Dog Tick.....(Aug.) 569
COLLINS, DONALD L., and WILLIAM MACHADO, Reactions of the Codling Moth to Artificial Light and the Use of Light Traps in Its Control.....(Dec.) 885
COLLINS, DONALD L., and ROBERT V. NARDY, Bordeaux and Other Sprays for Control of Japanese Beetle.....(Aug.) 525
COOK, WILLIAM C., Evaluation of a Field-Control Program Directed Against the Beet Leafhopper.....(June) 382
CORY; ERNEST N., Entomology and the War .....(Editorial, Apr.) 355
CORY, ERNEST N., MARTIN H. MUMA and GEORGE S. LANGFORD, Attractiveness of Certain Plant Constituents to the Japanese Beetle.....(Apr.) 248
COTTON, R. T., and H. D. YOUNG, Acrylonitrile and Trichloroacetonitrile in Admixture with Carbon Tetrachloride as Possible Fumigants for Stored Grain..... .....(Sci. Note, Feb.) 116
COTTON, R. T., and H. D. YOUNG, Certain Organic Bromides as Grain Fumigants.. .....(Sci. Note, Oct.) 796
COTTON, R. T., and H. D. YOUNG, Some Fumigants of the Nitroparaffin Group.... .....(Sci. Note, Feb.) 125
COX, ALVIN J., Terminology of Insecticides, Fungicides and Other Economic Poisons.. .....(Dec.) 813
COX, J. A., M. L. BOBB and W. S. HOUGH, A Fungous Disease of the Comstock Mealybug.....(Aug.) 580
CREIGHTON, JOHN T., Wilmon Newell, 1878–1943 (Obituary, Dec.)..... 948
CREIGHTON, JOHN T., G. W. DEKLE and JACK RUSSELL, The Use of Sulfur and Sulfur Compounds in the Control of Poultry Lice .....(June) 413
CRESSMAN, A. W., and B. M. BROADBENT, Effectiveness of Cube and Derris in a Tank Mix and an Emulsive Oil Against California Red Scale.....(June) 439

DAVIDSON, RALPH H., The Relative Effectiveness of Some Corn Earworm Control Measures in Sweet Corn..(Sci. Note, Dec.) 938
DAVIS, A. C., Effect of California Buckeye on Ants.....(Sci. Note, Oct.) 800
DAVIS, J. J., George Ethelbert Sanders..... .....(Obituary, Oct.) 810
DAVIS, J. J., Wesley Pillsbury Flint, 1883–1943.....(Obituary, Aug.) 644
DEAN, F. P., F. M. WADLEY and C. C. CASSIL, Sampling Studies on Orchard Spray Residues in the Pacific Northwest.....(Apr.) 227
DEAN, H. A., and J. C. GAINES, The Relative Effectiveness of Calcium Arsenates Composed of Large and of Small Particles..(Feb.) 67
DEBACH, PAUL, The Importance of Host-Feeding by Adult Parasites in the Reduction of Host Populations.....(Oct.) 647
DECKER, GEORGE C., Toxic-Dust Barriers for Chinch Bug Control.....(Oct.) 658
DEKLE, G. W., JOHN T. CREIGHTON and JACK RUSSELL, The Use of Sulfur and Sulfur Compounds in the Control of Poultry Lice .....(June) 413
DELONG, DWIGHT M., and GEORGE L. MCCALL, A Combination of 2,4-dinitro-6-cyclohexylphenol with Sulphur as a Substitute for Pyrethrum for Control of Potato Leafhopper.....(Sci. Note, Feb.) 112
DEONG, E. R., *Frianite*, an Insecticide Diluent .....(Sci. Note, Oct.) 799
DEONIER, CHRISTIAN C., and ARTHUR W. LINDQUIST, Studies on Ovicides for the Clear Lake Gnat.....(Feb.) 54
DEXTER, RALPH W., *Anurida maritima:* An Important Sea-Shore Scavenger..... .....(Sci. Note, Oct.) 797
DITMAN, L. P., The Corn Earworm Infestation of 1942.....(Sci. Note, Aug.) 629
DITMAN, L. P., GEORGE P. VOGHT and DWIGHT R. SMITH, Undercooling and Freezing of Insects.....(Apr.) 304
DOBROSCKY, IRENE D., Orchard Dusting Experiments with Natural Cryolite for Codling Moth.....(Sci. Note, Apr.) 350
DOMINICK, C. B., and GEORGE WENE, Abundance of *Microctonus epitricis* (Vier) in Virginia.....(Sci. Note, Feb.) 114
DONOHOE, HEBER C., A Comparison of Methods for the Fumigation of Empty Banana Refrigerator Cars with Liquid Hydrocyanic Acid.....(Sci. Note, Apr.) 328
DONOHOE, HEBER C., Development of New Methyl Bromide Fumigation Schedules for Use Against Japanese Beetles.....(Apr.) 260
DOUCETTE, CHARLES F., RALPH SCHOPP and PAUL M. EIDE, Experiments for Field Control of the Narcissus Bulb Fly.....(Dec.) 864
DRIGGERS, BYRLEY F., and ELTON J. HANSENS, The Comstock Mealybug on Apples and Peaches in New Jersey.....(Apr.) 222
DUNNAM, E. W., J. C. CLARK and S. L. CALHOUN, Effect of the Removal of Squares on Yield of Upland Cotton.....(Dec.) 896

EADS, R. B., The Larva of *Culex abominator* D. & K.....(Sci. Note, Apr.) 336
EADS, R. B., and T. MCGREGOR, Mosquitoes of Texas.....(Sci. Note, Dec.) 938
EASTER, STEPHEN S., and GRIFFIN L. PHILLIPS, Effect of Fumigation with Methyl Bromide and Paradichlorobenzene on Germination and Productivity of Seed Sweetpotatoes.....(Aug.) 552
EASTER STEPHEN S., G. L. PHILLIPS and G. HORAIST, JR., Methyl Bromide Fumigation for Control of the Sweetpotato Weevil and Its Effect on Yield.....(Feb.) 98
EICHMANN, R. D., Asparagus Miner Really Not a Pest.....(Dec.) 849
EICHMANN, R. D., Commercial Pea Warehouse Tests of Fumigants Used Against the Pea Weevil in the Palouse Region...(Dec.) 843
EIDE, PAUL M., Host Plants of the Banded Greenhouse Thrips.....(Sci. Note, Apr.) 327
EIDE, PAUL M., RALPH SCHOPP and CHARLES F. DOUCETTE, Experiments for Field Control of the Narcissus Bulb Fly.....(Dec.) 864
ELMORE, JOHN C., and ROY E. CAMPBELL, Aphid Increase and Plant Injury Following the Use of Calcium Arsenate on Peppers.. .....(Dec.) 853

ENGLISH, L. L., Fumigation of Camellias and Azaleas with Methyl Bromide.....(Oct.) 737
ESSIG., E. O., The Cork Oak Cynipid in California.....(Sci. Note, Feb.) 123
ESSIG, E. O., W. M. HOSKINS, E. G. LINSLEY, R. F. SMITH and A. E. MICHELBACHER, A Report on the Penetration of Packaging Materials by Insects.....(Dec.) 822
ESSIG, E. O., William Hunter Volck, 1879–1943.....(Obituary, June) 484
EWING, K. P., Cotton Aphid Damage and Control in Texas.....(Aug.) 598
EWING, K. P., and C. R. PARENCIA, JR., Dosages of Insecticides to Control the Boll Weevil and the Bollworm.....(Aug.) 607
EWING, K. P., and E. E. IVY, Some Factors Influencing Bollworm Populations and Damage.....(Aug.) 602
EYLES, DON E., Accidental Transportation of Mosquitoes by Automobile.....(Sci. Note, Apr.) 354

FAHEY, J. E., C. H. ARNOLD and L. F. STEINER, Soybean Phosphatides as Deposit-Builders in Nicotine Bentonite and Lead Arsenate Spray Mixtures for Control of the Codling Moth.....(Feb.) 70
FAHEY, J. E., C. H. ARNOLD and L. F. STEINER, Tests of Mississippi Bentonites in Tank-Mix Nicotine Bentonite Sprays for Control of the Codling Moth.....(Sci. Note, Apr.) 338
FALES, J. H., E. R. MCGOVRAN and P. G. PIQUETT, Relative Resistance of *Periplaneta americana* and *Blattella germanica* to Pyrethrum Spray.....(Oct.) 732
FELT, E. P., and S. W. BROMLEY, Shade Tree Insects and Protective Concealment in Military Areas.....(Sci. Note, Apr.) 326
FERNALD, H. T., Leonard Septimus McLaine 1887–1943.....(Obituary, Dec.) 946
FIFE, L. C., and IGNACIO MORENO, Additional Notes on Host Plants of the Pink Bollworm in Texas and Mexico.....(Sci. Note, June) 478
FILMER, ROBERT S., Performance of American Foulbrood Resistant Strain of Honeybees in New Jersey.....(Sci. Note, Apr.) 339
FLANDERS, STANLEY E., Indirect Hyperparasitism and Observations on Three Species of Indirect Hyperparasites.....(Dec.) 921
FLANDERS, STANLEY E., Mass Production of the California Red Scale and Its Parasite *Comperiella bifasciata*.....(Apr.) 233
FLANDERS, STANLEY E., The Potato Tuber Worm, a Host Suitable for Mass Production of *Macrocentrus ancylivorus*.....(Sci. Note, Oct.) 807
FLANDERS, STANLEY E., The Role of Mating in the Reproduction of Parasitic Hymenoptera.....(Sci. Note, Oct.) 802
FLANDERS, STANLEY E., The Susceptibility of Parasitic Hymenoptera to Sulfur.....(Sci. Note, June) 469
FLEMING, W. E., F. E. BAKER and L. KOBLITSKY, Effect of Lead Arsenate in Soil on Vegetables.....(Apr.) 231
FLETCHER, R. K., and F. L. THOMAS, Natural Control of Eggs and First Instar Larvae of *Heliothis armigera*.....(Aug.) 557
FLUKE, C. L., and T. R. CHAMBERLIN, DN Sulfur Dust Appears Effective Against the Sweetclover Weevil.....(Sci. Note, Oct.) 797
FLUKE, C. L., T. R. CHAMBERLIN and J. A. CALLENBACH, Species, Distribution, Flight and Host Preferences of June Beetles in Wisconsin.....(Oct.) 674
FREAR, D. E. H., and H. L. KING, Relation of Chemical Constitution of Some N-Heterocyclic Compounds to Toxicity to *Tetranychus telarius* (L.).....(Apr.) 263
FROST, S. W., An Observation Box for Solitary Bees and Wasps.....(Sci. Note, Oct.) 803
FRYER, H. C., A. O. SHAW, F. W. ATKESON, ROGER C. SMITH and A. RUSSELL BORGMANN, Techniques for Conducting Fly-Repellency Tests on Cattle.....(Feb.) 33
FRYER, H. C., ROGER C. SMITH, A. O. SHAW, F. W. ATKESON, A. RUSSELL BORGMANN and F. J. HOLMES, Tests of Fly Repellents of Known Ingredients and of Selected Commercial Sprays on Dairy Cattle..(Feb.) 23
FULTON, ROBERT A., L. B. HOWARD and R. L. BUSBEY, Adherence and Retention of Sulfur on Citrus Foliage.....(Aug.) 516
FULTON, ROBERT A., and R. L. BUSBEY, Apparatus for Laboratory Fumigation of the California Red Scale.....(Sci. Note, Aug.) 628
FULTON, ROBERT A., and HAROLD R. YUST, An Exudation Associated with the Feeding Location of the California Red Scale.....(Sci. Note, Apr.) 346

GAINES, J. C., Comparative Tests of Certain Insecticides and Variations in Schedules for Cotton Insect Control.....(Feb.) 79
GAINES, J. C., and H. A. DEAN, The Relative Effectiveness of Calcium Arsenates Composed of Large and of Small Particles.(Feb.) 76
GAINES, R. C., Relation Between Winter Temperatures, Boll Weevil Survival, Summer Rainfall, and Cotton Yields.....(Feb.) 82
GAINES, R. C., G. L. GARRISON and M. T. YOUNG, Calcium Arsenate With and Without Cube and Nicotine for Control of the Boll Weevil and the Cotton Aphid, at Tallulah, La., in 1942.....(Dec.) 901
GARMAN, PHILIP, Studies of Reduced Schedules for Control of Apple Insects in Connecticut.....(Apr.) 211
GARRISON, G. L., M. T. YOUNG and R. C. GAINES, Calcium Arsenate With and Without Cube and Nicotine for Control of the Boll Weevil and the Cotton Aphid, at Tallulah, La., in 1942.....(Dec.) 901
GERTLER, S. I., and E. H. SIEGLER, Tests of N-Substituted P Bromobenzenesulfonamides Against Codling Moth.....(Sci. Note, June) 473
GIBSON, ARCHIE L., Penetrating Sprays to Control the Mountain Pine Beetle..(June) 396
GIBSON, ARTHUR, International Entomology.....(Editorial, Dec.) 944
GINSBURG, JOSEPH M., Basic Lead Arsenate: Its Effect on Peach Trees and Compatibility with Various Chemicals.....(Aug.) 531
GOODEN, ERNEST L., Density and Particle Size of Derris and Cube Powders.....(Sci. Note, Aug.) 632
GOODHUE, L. D., and FLOYD F. SMITH, Toxicity of Nicotine Aerosols to the Green Peach Aphid Under Greenhouse Conditions.....(Dec.) 911
GORDON, W. M., Airplane Runways Damaged by Ants.....(Sci. Note, Apr.) 354
GRAHAM, OWEN H., CHARLES L. SMITH and ROY MELVIN, Some Observations on Chiggers.....(Sci. Note, Dec.) 940
GRAHAM, LEWIS T., and H. DOUGLAS TATE, Nebraska Cattle Grub Survey.....(Sci. Note, Oct.) 801
GRAYSON, J. M., Observations on a Lepidopterus Borer in Ash.....(Sci. Note, June) 479

GRAYSON, J. M., and E. W. KING, The Toxicity of Ethide to the Firebrat and Three Species of Stored Grain Insects.....(Aug.) 540
GRIFFITHS, JAMES T., JR., and OSCAR E. TAUBER, Evaluation of Sodium Fluoride as a Stomach Poison and as a Contact Insecticide Against the Roach *Periplaneta americana* L.....(Aug.) 536
GUNTHER, FRANCIS A., Effects of Oxygen and Sunlight on Decomposition of Rotenone in Spray Mixtures.....(Apr.) 273
GURNEY, ASHLEY B., A Mosquito Survey of Camp Crowder, Missouri, During 1942.....(Dec.) 927

HALLER, H. L., and N. E. MCINDOO, The Castor-Bean Plant as a Source of Insecticides.....(Sci. Note, Aug.) 638
HALLER, H. L., MILTON S. SCHECHTER and HENRY H. RICHARDSON, Toxicity of Some Nitroparaffins to the Confused Flour Beetle .....(Sci. Note, Feb.) 111
HALLER, H. L., MILTON S. SCHECHTER, W. N. SULLIVAN, Insecticidal Tests with *Phellodendron amurense* Extractive and Several of its Fractions.....(Sci. Note, Dec.) 937
HAMILTON, CLYDE C., The Pine Sawfly *Neodiprion sertifer* Geoff. and Its Control with Concentrated Lead Arsenate Sprays.(Apr.) 236
HANSBERRY, ROY, and CECIL SU-SIN LEE, The Yam Bean, *Pachyrrhizus erosus* Urban, as a Possible Insecticide..(Sci. Note, Apr.) 351
HANSBERRY, ROY, and CECIL SU-SIN LEE, Toxicity Studies of Some Chinese Plants.. .....(Dec.) 915
HANSEN, JAMES W., Surface Area of Persian Walnuts.....(Sci. Note, Apr.) 347
HANSENS, ELTON J., and BYRLEY F. DRIGGERS, The Comstock Mealybug on Apples and Peaches in New Jersey.....(Apr.) 222
HARMAN, S. W., Further Studies on Rotenone and Other Organic Insecticides for Codling Moth Control.....(Apr.) 200
HARRIES, F. H., Some Effects of Alternating Temperatures and Exposure to Cold on Embryonic Development of the Beet Leafhopper.....(Aug.) 505
HARRINGTON, C. D., The Occurrence of Physiological Races of the Pea Aphid.... .....(Sci. Note, Feb.) 118
HARRISON, P. K., and ROSS W. BRUBAKER, Relative Abundance of Cabbage Caterpillars on Cole Crops Grown under Similar Conditions.....(Aug.) 589
HARTZELL, ALBERT, Pyrethrum Culture in Dalmatia with Some Applications to the Americas.....(Apr.) 320
HASTINGS, ELLSWORTH, and J. H. PEPPER, Age Variations in Exoskeletal Composition of the Sugar Beet Webworm and Their Possible Effect on Membrane Permeability.. .....(Sci. Note, Aug.) 633
HASTINGS, ELLSWORTH, and J. H. PEPPER, Studies on Body Fluids of Seven Orthopterans, Their ph, Buffering Capacity, and Effect on Solubility of Fractionated Insecticides.....(Dec.) 857
HATCH, MELVILLE H., *Ptinus tectus* Damaging Furs in Alaska.....(Sci. Note, Apr.) 353
HAVILAND, ELIZABETH E., Hibernation and Survival of the Locust Leaf-Miner..... .....(Sci. Note, Aug.) 639
HAYDAK, MYKOLA H., Larval Food and Development of Castes in the Honeybee.(Oct.) 778
HENDERSON, CHARLES F., Concentration of HCN and Mortality of *Cryptolaemus montrouzerieri* in the Foliage of a Fumigated Tree and on the Ground Beneath....(Aug.) 519
HENRY, J. R., and R. L. MCGARR, Insecticide Tests for Boll Weevil and Cotton Aphid Control in the Mississippi Delta....(Oct.) 716
HERMS, W. B., Preparation for a Career as a Medical Entomologist.....(Feb.) 18
HILL, ROSCOE E., and H. DOUGLAS TATE, Increases in Aphid Populations on Potato Plants Sprayed with Zinc Arsenite in Western Nebraska.....(Feb.) 63
HODSON, A. C., Lures Attractive to the Apple Maggot.....(Aug.) 545
HOLLOWAY, J. K., and T. ROY YOUNG, Influence of Fungicidal Sprays on Entomogenous Fungi and on the Purple Scale in Florida.....(June) 453
HOLMES, F. J., ROGER C. SMITH, A. O. SHAW, F. W. ATKESON, H. C. FRYER and A. RUSSELL BORGMANN, Tests of Fly Repellents of Known Ingredients and of Selected Commercial Sprays on Dairy Cattle....(Feb.) 23
HORAIST, G., JR., G. L. PHILLIPS and S. S. EASTER, Methyl Bromide Fumigation for Control of the Sweetpotato Weevil and its Effect on Yield.....(Feb.) 98
HORSFALL, WILLIAM R., and DWIGHT ISELY, Effect on Arsenical Deposits of Accessory Materials in the Spray Mixture.....(Oct.) 751
HOSKINS, W. M., E. O. ESSIG, E. G. LINSLEY, R. F. SMITH and A. E. MICHELBACHER, A Report on the Penetration of Packaging Materials by Insects.....(Dec.) 822
HOUGH, W. S., M. L. BOBB and J. A. COX, A Fungous Disease of the Comstock Mealybug.....(Aug.) 580
HOVEY, CHARLES L., Effects of Temperature and Humidity on Certain Developmental Stages of the Potato Tuber Moth..... .....(Sci. Note, Aug.) 627
HOWARD, L. B., R. L. BUSBEY and ROBERT A. FULTON, Adherence and Retention of Sulfur on Citrus Foliage.....(Aug.) 516
HOWARD, NEALE F., and J. W. APPLE, Toxicity of Cube-Vegetable Oil Dusts to Two Species of Aphids.....(Feb.) 59
HOWLAND, A. F., and J. WILCOX, Damage to Strawberry Fruit by Small Darkling Beetles .....(Sci. Note, Feb.) 116
HUFFAKER, CARL B., and RICHARD C. BACK, A Study of Methods of Sampling Mosquito Populations.....(Aug.) 561
HULL, J. B., and S. E. SHIELDS, Diking as a Measure for Sand Fly Control in Salt Marshes.....(June) 405
HULL, J. B., and S. E. SHIELDS, The Seasonal Incidence of Sand Flies in Florida..... .....(Sci. Note, Aug.) 625
HULL, J. B., S. E. SHIELDS and N. G. PLATTS, Diking and Pumping for Control of Sand Flies and Mosquitoes in Florida Salt Marshes .....(June) 409
HUTSON, RAY, and WILLIAM DOWELL BATEN, Precautions Necessary in Estimating Populations of Small Animals.....(Aug.) 501
HUTZEL, JOHN M., Sodium Fluoride Crayons for Roach Control.....(Feb.) 67
HYSLOP, J. A., Insect Pest Survey..... .....(Editorial, Feb.) 128

INGLE, LESTER, An Apparatus for Testing Chemotropic Responses of Flying Insects .....(Feb.) 108
IRONS, FRANK, and D. D. QUESTEL, Insecticidal Treatment of Market Sweet Corn with High-Clearance Boom Equipment for Con-

trol of the European Corn Borer....(Dec.) 893
ISELY, DWIGHT, Early Maturing Varieties in Codling Moth Control.....(Oct.) 757
ISELY, DWIGHT, and WILLIAM R. HORSFALL, Effect on Arsenical Deposits of Accessory Materials in the Spray Mixture.....(Oct.) 751
IVY, E. E., and K. P. EWING, Some Factors Influencing Bollworm Populations and Damage.....(Aug.) 602

JEFFERSON, R. N., Influence of Carbon Tetrachloride on the Toxic Efficiency of Certain Volatile Organic Compounds.....(Apr.) 253
JOHNSON, J. PETER, The Effect of Hot Water Treatment for Cyclamen Mite upon Cyclamen Plants.....(Apr.) 286
JOHNSTON, H. R., Laboratory Tests of Termite Shields.....(June) 386
JONES, T. H., and D. O. WOLFENBARGER, Intensity of Attacks by *Scolytus multistriatus* at Distances from Dispersion and Convergence Points.....(June) 399

KARTMAN, LEO, New Developments in the Study of Ectoparasite Resistance....(June) 372
KEIFER, H. H., and S. F. BAILEY, The Tomato Russet Mite, *Phyllocoptes destructor* Keifer: Its Present Status.....(Oct.) 706
KING, E. W., and J. M. GRAYSON, The Toxicity of *Ethide* to the Firebrat and Three Species of Stored Grain Insects.....(Aug.) 540
KING, H. L., and D. E. H. FREAR, Relation of Chemical Constitution of Some N-Heterocyclic Compounds to Toxicity to *Tetranychus telarius* (L.).....(Apr.) 263
KING, WILLARD V., Some Entomological Aspects of Troop Mobilization.....(Aug.) 577
KING, WILLARD V., LOUIS ROTH, JAMES TOFFALETI and WOODROW W. MIDDLEKAUFF, New Distribution Records for the Mosquitoes of the Southeastern United States During 1942.....(Aug.) 573
KNOWLTON, GEORGE F., Three New Insect Pests Invade Utah.....(Sci. Note, Apr.) 353
KNOWLTON, GEORGE F., and STEPHEN L. WOOD, Utah Bird Predators of the False Chinch Bug.....(Sci. Note, Apr.) 332
KNUTSON, HERBERT, The Status of the Mosquitoes of the Great Swamp in Rhode Island During 1942.....(Apr.) 311
KOBLITSKY, L., and R. D. CHISHOLM, Sorption of Methyl Bromide by Soil in a Fumigation Chamber.....(Aug.) 549
KOBLITSKY, L., F. E. BAKER and W. E. FLEMING, Effect of Lead Arsenate in Soil on Vegetables.....(Apr.) 231
KULASH, WALTER M., The Ecology and Control of Wireworms in the Connecticut River Valley.....(Oct.) 689

LAMERSON, PAUL G., and RALPH L. PARKER, Lead Arsenate and Tricalcium Arsenate Combinations for the Control of Codling Moth.....(Apr.) 205
LANGE, W. H., JR., Dichloroethyl Ether for Cabbage Maggot Control..(Sci. Note, Oct.) 806
LANGFORD, GEORGE S., MARTIN H. MUMA and ERNEST N. CORY, Attractiveness of Certain Plant Constituents to the Japanese Beetle.....(Apr.) 248
LARSON, N. P., The Common Toad as an Enemy of Blister Beetles..(Sci. Note, June) 480
LATTA, RANDALL, and ALFRED H. YEOMANS, Methods and Equipment for Fumigation of Clothing Infested with Body Lice..(June) 402
LEE, CECIL SU-SIN, and ROY HANSBERRY, The Yam Bean, *Pachyrrhizus erosus* Urban, as a Possible Insecticide..(Sci. Note, Apr.) 351
LEE, CECIL SU-SIN, and ROY HANSBERRY, Toxicity Studies of Some Chinese Plants.....(Dec.) 915
LEVIN, CLEMENCE, The Effect of Tobacco Plant-Bed Construction on the Development of Flea Beetle Populations....(Aug.) 622
LILLY, JOHN H., Combination Rotenone-Nicotine "Blends" for Pea Aphid Control.....(Feb.) 85
LINDGREN, D. L., and H. J. QUAYLE, A Gastight Fabric for Fumigation Purposes.....(Sci. Note, Feb.) 125
LINDQUIST, ARTHUR W., and CHRISTIAN C. DEONIER, Studies on Ovicides for the Clear Lake Gnat.....(Feb.) 54
LINSLEY, E. GORTON, Attraction of Melanophila Beetles by Fire and Smoke.....(Sci. Note, Apr.) 341
LINSLEY, E. GORTON, Delayed Emergence of *Buprestis aurulenta* from Structural Timbers.....(Sci. Note, Apr.) 348
LINSLEY, E. GORTON, The Date-Stone Beetle in California and Lower California.....(Sci. Note, Oct.) 804
LINSLEY, E. GORTON, The Dried Fruit Moth Breeding in Nests of the Mountain Carpenter Bee in California..(Sci. Note, Feb.) 122
LINSLEY, E. GORTON, The Spelling of Scientific Names of Some Stored Food Product Pests.....(Sci. Note, Feb.) 125
LINSLEY, E. G., E. O. ESSIG, W. M. HOSKINS R. F. SMITH, and A. E. MICHELBACHER, A Report on the Penetration of Packaging Materials by Insects.....(Dec.) 822
LINSLEY, E. G., and A. E. MICHELBACHER, A Report on Insect Infestation of Stored Grain in California.....(Dec.) 829
LIST, GEORGE M., A Portable Spray Boom for Experimental Plots.....(Sci. Note, June) 472
LIST, GEORGE M., Results of 1942 Experiments for Control of the Mexican Bean Beetle at Fort Collins, Colorado.....(Sci. Note, Aug.) 624
LIST, GEORGE M., The Effects of Sulfur Residue on Keeping Qualities of Canned Tomato Products.....(Oct.) 694
LOGAN, STANLEY H., and THOMAS C. WATKINS, Reduction of Flea Beetle Injury to Tomato Transplants by Treatment Prior to Setting.....(Aug.) 584
LOWMAN, M. S., A. F. SIEVERS, and G. A. RUSSELL, Factors Affecting the Rotenone Content of Devil's Shoestring.....(Aug.) 593
LUND, HORACE O., Horsefly Control Incidental to Mosquito Control.....(Sci. Note, Feb.) 127
LYLE, CLAY, Dillard Wister Grimes, 1891–1943.....(Obituary, Apr.) 359

MACHADO, WILLIAM, and DONALD L. COLLINS, Reactions of the Codling Moth to Artificial Light and the Use of Light Traps in Its Control.....(Dec.) 885
MACKENSON, OTTO, The Occurrences of Parthenogenetic Females in Some Strains of Honeybees.....(June) 465
MACLEOD, G. F., and RAY F. SMITH, Alfalfa Butterfly Control with Sulphur Dusts.....(Oct.) 665
MCCALL, GEORGE L., and DWIGHT M. DELONG, A Combination of 2,4-dinitro-6-cyclohexylphenol with Sulphur as a Substitute for Pyrethrum for Control of Potato Leafhopper.....(Sci. Note, Feb.) 112
MCCLINTICK, K. B., and J. A. BEAL, The Pales

Weevil in Southern Pines.....(Oct.) 792
McFARLANE, J. S., and G. H. RIEMAN, Leafhopper Resistance Among the Bean Varieties.....(Sci. Note, Aug.) 639
McGARR, R. L., Relation of Fertilizers to the Development of the Cotton Aphid in 1941 and 1942.....(Sci. Note, Aug.) 640
McGARR, R. L., and J. R. HENRY, Insecticide Tests for Boll Weevil and Cotton Aphid Control in the Mississippi Delta....(Oct.) 716
McGOVRAN, E. R., and P. G. PIQUETT, Toxicity of Thiourea and Phthalonitrile to Housefly Larvae.....(Sci. Note, Dec.) 936
McGOVRAN, E. R., J. H. FALES and P. G. PIQUETT, Relative Resistance of *Periplaneta americana* and *Blattella germanica* to Pyrethrum Spray.....(Oct.) 732
McGREGOR, E. A., Toxicity of Anabasine to the Citrus Thrips.....(Sci. Note, Oct.) 805
McGREGOR, T., and R. B. EADS, Mosquitoes of Texas.....(Sci. Note, Dec.) 938
McINDOO, N. E., Present Status and Future Trends of Nicotine as an Insecticide.....(Sci. Note, June) 473
McINDOO, N. E., and H. L. HALLER, The Castor-Bean Plant as a Source of Insecticides.....(Sci. Note, Aug.) 638
McPHAIL, M., Linseed Oil Soap—A New Lure for the Melon Fly.....(June) 426
MAIL, G. ALLEN, and R. W. SALT, The Freezing of Insects—A Criticism and Explanation.....(Sci. Note, Feb.) 126
MANN, H. D., C. M. SMITH and R. H. CARTER, The Chemical Nature of Copper-Arsenic Insecticides.....(Sci. Note, Dec.) 941
MARCH, R. B., and J. H. BIGGER, Rearing Southern Corn Rootworms on Seedling Corn Plants.....(Sci. Note, Apr.) 349
MARKOS, BASIL G., and F. L. CAMPBELL, Effect of Host Plant on the Susceptibility of the Southern Armyworm to Calcium Arsenate.....(Oct.) 662
MARSHALL, G. EDWARD, The Control of the Oriental Fruit Moth by Mechanical Means.....(Sci. Note, June) 468
MARTORELL, LUIS F., and GEORGE N. WOLCOTT, Control of the Sugarcane Borer in Puerto Rico by Laboratory-reared Parasites.....(June) 460
MASON, ARTHUR C., ROBERT D. CHISHOLM and EMORY D. BURGESS, Ethylene Dichloride Treatments for the Immature Stages of the Japanese Beetle.....(Oct.) 734
MATTHYSSE, J. G., and H. H. SCHWARDT, New Recommendations for Large Scale Control of the Sheep Tick in the Northeast..(Feb.) 105
MATTHYSSE, J. G., and H. H. SCHWARDT, Substitutes for Rotenone in Cattle Louse Control.....(Oct.) 718
MAYER, E. L., and A. M. PHILLIPS, Di-n-Butylamine as a Fumigant.....(Sci. Note, Dec.) 942
MELVIN, ROY, CHARLES L. SMITH and OWEN H. GRAHAM, Some Observations on Chiggers.....(Sci. Note, Dec.) 940
MELVIN, ROY, and L. E. SMITH, The Toxicity of Some Heterocyclic Compounds to Young Screwworms.....(Sci. Note, June) 475
METCALF, C. L., Entomological Training for the Armed Forces.....(Editorial, June) 482
MICHELBACHER, A. E., E. O. ESSIG, W. M. HOSKINS, R. F. SMITH, and E. G. LINSLEY, A Report on the Penetration of Packaging Materials by Insects.....(Dec.) 822
MICHELBACHER, A. E., and E. G. LINSLEY, A Report on Insect Infestation of Stored Grain in California.....(Dec.) 829
MIDDLEKAUFF, WOODROW W., W. V. KING, LOUIS ROTH and JAMES TOFFALETI, New Distribution Records for the Mosquitoes of the Southeastern United States.....(Aug.) 573
MILAM, JOE, and L. B. SCOTT, Isoamyl Salicylate as an Attractant for Hornworm Moths.....(Oct.) 712
MILAM, JOE, and L. B. SCOTT, Cryolite Injury to Tobacco Seedlings.....(Sci. Note, Apr.) 335
MILLER, LAWRENCE I., A White Grub Injuring Peanuts in Eastern Virginia.....(Sci. Note, Feb.) 113
MILLS, HARLOW B., An Outbreak of the Snipe Fly *Symphoromyia hirta*...(Sci. Note, Oct.) 806
MINER, FLOYD D., and THOMAS C. WATKINS, Flight Habits of the Carrot Rust Flies Suggest Possible Method of Control....(Aug.) 586
MONK, J. W., C. C. PLUMMER and J. G. SHAW, Field Studies on Insecticides for the Control of the Mexican Fruitfly.....(Dec.) 904
MORENO, IGNACIO, and L. C. FIFE, Additional Notes on Host Plants of the Pink Bollworm in Texas and Mexico.....(Sci. Note, June) 478
MORRILL, A. W., JR., The Control of *Limonius agonus* (Say) on Shade-Grown Tobacco..(June) 392
MUMA, MARTIN H., GEORGE S. LANGFORD and ERNEST N. CORY, Attractiveness of Certain Plant Constituents to the Japanese Beetle.....(Apr.) 248
MUNRO, J. A., The Viscosity and Thixotropy of Honey.....(Oct.) 769

NARDY, ROBERT V., and DONALD L. COLLINS, Bordeaux and Other Sprays for Control of Japanese Beetle.....(Aug.) 525
NELSON, HOWARD D., The Position of the Rostralis of the California Red Scale Feeding on Lemons.....(Oct.) 750
NELSON, HOWARD D., HAROLD R. YUST and R. L. BUSBEY, Comparative Susceptibility of Two Strains of California Red Scale to HCN, with Special Reference to Inheritance of Resistance.....(Oct.) 744
NELSON, HOWARD D., HAROLD R. YUST and R. L. BUSBEY, Influence of Decreasing, Constant and Increasing Concentrations on Results of Fumigation of the California Red Scale with HCN.....(Dec.) 875
NELSON, HOWARD D., HAROLD R. YUST and R. L. BUSBEY, Influence of Inbreeding on the Susceptibility of the California Red Scale to HCN.....(Sci. Note, Apr.) 352
NELSON, HOWARD D., HAROLD R. YUST, and R. L. BUSBEY, The Influence of Repeated Fumigation with HCN on the Susceptibility of the California Red Scale.....(Dec.) 872
NELSON, O. A., NORMAN ALLEN and CHARLES SMITH, Some Chemotropic Studies with *Autographa* spp.....(Aug.) 619
NETTLES, W. C., Plant Stimulation Aids in Control of *Pissodes nemorensis* on *Cedrus deodara*.....(Sci. Note, Apr.) 345
NEWCOMER, E. J., Apparent Control of the Pacific Mite with Xanthone.....(Sci. Note, Apr.) 344

PARENCIA, C. R., JR., and K. P. EWING, Dosages of Insecticides to Control the Boll Weevil and the Bollworm.....(Aug.) 607
PARISH, HENRY E., Sodium Fluosilicate to Control Poultry Lice.....(Sci. Note, Apr.) 353
PARKER, RALPH L., and PAUL G. LAMERSON, Lead Arsenate and Tricalcium Arsenate Combinations for the Control of Codling

Moth.....(Apr.) 205
PEAIRS, L. M., Entomology in 1943.....(Editorial, Feb.) 129
PEAIRS, L. M., Post-War Entomology.....(Editorial, Aug.) 642
PECHUMAN, L. L., *Epitrimerus pyri* Nal. in New York.....(Sci. Note, Feb.) 116
PECHUMAN, L. L., *Scolytus sulcatus* Lec. in Western New York.....(Sci. Note, Feb.) 119
PEARCE, G. W., P. J. CHAPMAN, and A. W. AVENS, Relation of Composition to the Efficiency of Foliage or Summer Type Petroleum Fractions.....(Apr.) 241
PEPPER, BAILEY B., The Relationship between Cropping Practices and Injury by *Heliothis armigera* with Especial Reference to Lima Beans and Tomatoes.....(Sci. Note, Apr.) 329
PEPPER, J. H., and ELLSWORTH HASTINGS, Studies on Body Fluids of Seven Orthopterans, their pH, Buffering Capacity, and Effect on Solubility of Fractionated Insecticides.....(Dec.) 857
PEPPER, J. H., and ELLSWORTH HASTINGS, Age Variations in Exoskeletal Composition of the Sugar Beet Webworm and Their Possible Effect on Membrane Permeability.....(Sci. Note, Aug.) 633
PETERSON, ALVAH, Some New Killing Fluids for Larvae of Insects.....(Sci. Note, Feb.) 115
PHILLIPS, A. M., and E. L. MAYER, Di-n-Butylamine as a Fumigant.....(Sci. Note, Dec.) 942
PHILLIPS, GRIFFIN L., and STEPHEN S. EASTER, Effect of Fumigation with Methyl Bromide and Paradichlorobenzene on Germination and Productivity of Seed Sweetpotatoes.....(Aug.) 552
PHILLIPS, GRIFFIN L., S. S. EASTER and G. HORAIST, JR., Methyl Bromide Fumigation for Control of the Sweetpotato Weevil and Its Effect on Yield.....(Feb.) 98
PIERSON, C. J., Rennie Wilbur Doane, 1871–1942.....(Obituary, Feb.) 131
PIQUETT, P. G., and E. R. MCGOVRAN, Toxicity of Thiourea and Phthalonitrile to Housefly Larvae.....(Sci. Note, Dec.) 936
PIQUETT, P. G., E. R. MCGOVRAN and J. H. FALES, Relative Resistance of *Periplaneta americana* and *Blattella germanica* to Pyrethrum spray.....(Oct.) 732
PLATTS, N. G., S. E. SHIELDS and J. B. HULL, Diking and Pumping for Control of Sandflies and Mosquitoes in Florida Salt Marshes.....(June) 409
PLETSCH, D. J., The Say Stinkbug on Potatoes in Montana.....(Sci. Note, Apr.) 334
PLUMMER, C. C., J. W. MONK and J. G. SHAW, Field Studies on Insecticides for the Control of the Mexican Fruitfly.....(Dec.) 904
POLLARD, H. N., and NORMAN ALLEN, Damage to Tobacco by a Local Outbreak of *Heliothis armigera* and Some Control Methods Employed.....(Sci. Note, Aug.) 635
PYENSON, LOUIS, A Destructive Apple Sawfly New to North America.....(Apr.) 218

QUAYLE, H. J., The Increase in Resistance in Insects to Insecticides.....(Aug.) 493
QUAYLE, H. J., and D. L. LINDGREN, A Gastight Fabric for Fumigation Purposes.....(Sci. Note, Feb.) 125
QUESTEL, D. D., Insecticidal Treatment of Market Sweet Corn with High-Clearance Boom Equipment for Control of the European Corn Borer.....(Dec.) 893

REED, W. D., and R. W. BRUBAKER, Fumigation of Tobacco at Reduced Pressures.....(Apr.) 300
REED, W. D., and L. W. BRANNON, Survey of Tobacco Carriers for Stored-Tobacco Pests.....(Apr.) 295
REEHER, MAX M., and L. P. ROCKWOOD, Forecasting Outbreaks of the Pea Aphid on Fall-Sown Annual Legumes in the Pacific Northwest.....(Dec.) 832
REINHARD, H. J., "A Classification of Larvae and Adults of the Genus Phyllophaga (Coleoptera: Scarabaeidae)".....(Review, Aug.) 645
RICHARDSON, HENRY H., Studies of Methyl Bromide, Chloropicrin, Certain Nitriles and Other Fumigants Against the Bedbug.....(June) 420
RICHARDSON, HENRY H., The Action of Bean Leaves Against the Bedbug.....(Aug.) 543
RICHARDSON, HENRY H., Toxicity of Derris, Nicotine and Other Insecticides to Eggs of the Housefly, and the Angoumois Grain Moth.....(Oct.) 729
RICHARDSON, HENRY H., MILTON S. SCHECHTER and H. L. HALLER, Toxicity of Some Nitroparaffins to the Confused Flour Beetle.....(Sci. Note, Feb.) 111
RIEMAN, G. H., and J. S. MCFARLANE, Leafhopper Resistance Among the Bean Varieties.....(Sci. Note, Aug.) 639
ROARK, R. C., Agricultural Insecticides and Critical War Materials.....(Oct.) 720
ROARK, R. C., Volatile Fluorine Compounds as Insecticides.....(Sci. Note, Feb.) 111
ROCKWOOD, L. P., and T. R. CHAMBERLIN, The Western Spotted Cucumber Beetle as a Pest of Forage Crops in the Pacific Northwest.....(Dec.) 837
ROCKWOOD, L. P., and MAX M. REEHER, Forecasting Outbreaks of the Pea Aphid on Fall-sown Annual Legumes in the Pacific Northwest.....(Dec.) 832
ROSENSTIEL, R. G., The Effect of Certain Chemicals on the Cherry Fruit Fly.....(Sci. Note, Oct.) 800
ROTH, LOUIS, W. V. KING, JAMES TOFFALETI and WOODROW W. MIDDLEKAUFF, New Distribution Records for the Mosquitoes of the Southeastern United States During 1942.....(Aug.) 573
RUSSELL, G. A., M. S. LOWMAN and A. F. SIEVERS, Factors Affecting the Rotenone Content of Devil's Shoestring.....(Aug.) 593
RUSSELL, JACK, G. W. DEKLE and JOHN T. CREIGHTON, The Use of Sulfur and Sulfur Compounds in the Control of Poultry Lice.....(June) 413

SALT, R. W., and G. ALLEN MAIL, The Freezing of Insects—A Criticism and Explanation.....(Sci. Note, Feb.) 126
SCHECHTER, MILTON S., HENRY H. RICHARDSON and H. L. HALLER, Toxicity of Some Nitroparaffins to the Confused Flour Beetle.....(Sci. Note, Feb.) 111
SCHECHTER, MILTON S., W. N. SULLIVAN and H. L. HALLER, Insecticidal Tests with *Phellodendron amurense* Extractive and Several of its Fractions.....Sci. Note (Dec.) 937
SCHOPP, RALPH, PAUL M. EIDE and CHARLES F. DOUCETTE, Experiments for Field Control of the Narcissus Bulb Fly.....(Dec.) 864
SCHWARDT, H. H., and J. G. MATTHYSSE, New Recommendations for Large Scale Control of the Sheep Tick in the Northeast..(Feb.) 105
SCHWARDT, H. H., and J. G. MATTHYSSE, Substitutes for Rotenone in Cattle Louse Control.....(Oct.) 718
SCHWARDT, H. H., and W. H. WHITCOMB, Life History of the European Chafer *Amphi-*

mallon majalis (Razoum)..(Sci. Note, Apr.) 345
SCOTT, L. B., and JOE MILAM, Cryolite Injury to Tobacco Seedlings.....(Sci. Note, Apr.) 335
SCOTT, L. B., and JOE MILAM, Isoamyl Salicylate as an Attractant for Hornworm Moths .....(Oct.) 712
SECREST, J. P., and F. F. BIBBY, Sodium Fluoride as an Ant Control..... .....(Sci. Note, Aug.) 515
SHAW, A. O., H. C. FRYER, F. W. ATKESON, ROGER C. SMITH and A. RUSSELL BORGMANN, Techniques for Conducting Fly-Repellency Tests on Cattle.....(Feb.) 33
SHAW, A. O., ROGER C. SMITH, F. W. ATKESON, H. C. FRYER, A. RUSSELL BORGMANN and F. J. HOLMES, Test of Fly Repellents of Known Ingredients and of Selected Commercial Sprays on Dairy Cattle.....(Feb.) 23
SHAW, J. G., C. C. PLUMMER and J. W. MONK, Field Studies on Insecticides for the Control of the Mexican Fruitfly.....(Dec.) 904
SHIELDS, S. E., and J. B. HULL, Diking as a Measure for Sand Fly Control in Salt Marshes.....(June) 405
SHIELDS, S. E., and J. B. HULL, The Seasonal Incidence of Sand Flies in Florida..... .....(Sci. Note, Aug.) 625
SHIELDS, S. E., N. G. PLATTS and J. B. HULL, Diking and Pumping for Control of Sand Flies and Mosquitoes in Florida Salt Marshes .....(June) 409
SIEGLER, E. H., and S. I. GERTLER, Tests of N-Substituted P-Bromobenzenesulfonamides Against Codling Moth..... .....(Sci. Note, June) 473
SIEVERS, A. F., M. S. LOWMAN and G. A. RUSSELL, Factors Affecting the Rotenone Content of Devil's Shoestring.....(Aug.) 593
SMITH, CARROLL N., and MOSES M. COLE, Studies of Parasites of the American Dog Tick.....(Aug.) 569
SMITH, CHARLES E., NORMAN ALLEN and O. A. NELSON, Some Chemotropic Studies with *Autographa* spp.....(Aug.) 619
SMITH, CHARLES L., ROY MELVIN and OWEN H. GRAHAM, Some Observations on Chiggers .....(Sci. Note, Dec.) 940
SMITH, CLYDE F., Experiments with the Peach Tree Borer in North Carolina.....(Apr.) 215
SMITH, C. M., R. H. CARTER and H. D. MANN, The Chemical Nature of Copper-Arsenic Insecticides.....(Sci. Note, Dec.) 941
SMITH, DWIGHT R., GEORGE P. VOGHT and L. P. DITMAN, Undercooling and Freezing of Insects.....(Apr.) 304
SMITH, FLOYD F., Substitutes for Tartar Emetic and Brown Sugar in the Control of the Gladiolus Thrips.....(June) 445
SMITH, FLOYD F., and L. D. GOODHUE, Toxicity of Nicotine Aerosols to the Green Peach Aphid Under Greenhouse Conditions.(Dec.) 911
SMITH, HERBERT D., Laboratory Rearing of *Microbracon vestiticida* Vier. on the Bean Weevil, with Notes on the Life History of the Parasite.....(Feb.) 101
SMITH, L. E., and ROY MELVIN, The Toxicity of Some Heterocyclic Compounds to Young Screwworms.....(Sci. Note, June) 475
SMITH, R. F., E. O. ESSIG, W. M. HOSKINS, E. G. LINSLEY and A. E. MICHELBACHER, A Report on the Penetration of Packaging Materials by Insects.....(Dec.) 822
SMITH, RAY F., and G. F. MACLEOD, Alfalfa Butterfly Control with Sulphur Dusts.(Oct.) 665
SMITH, ROGER C., H. C. FRYER, A. O. SHAW, F. W. ATKESON and A. RUSSELL BORGMANN, Techniques for Conducting Fly-Repellency Tests on Cattle.....(Feb.) 33
SMITH, ROGER C., A. O. SHAW, F. W. ATKESON, H. C. FRYER, A. RUSSELL BORGMANN and F. J. HOLMES, Tests of Fly Repellents of Known Ingredients and of Selected Commercial Sprays on Dairy Cattle.....(Feb.) 23
SMITH, ROGER C., "Outlines of Entomology" .....(Review, Apr.) 359
SNAPP, OLIVER I., Propylene Dichloride for Peachtree Borer Control.....(Oct.) 765
STEINER, L. F., and C. H. ARNOLD, Influence of Changes in Relative Humidity on the Effect of Certain Insecticides on Newly Hatched Codling Moth Larvae..... .....(Sci. Note, Feb.) 117
STEINER, L. F., and S. A. SUMMERLAND, Codling Moth Oviposition and Fate of Eggs .....(Feb.) 72
STEINER, L. F., and S. A. SUMMERLAND, Xanthone as an Ovicide and Larvicide for Codling Moth.....(June) 435
STEINER, L. F., C. H. ARNOLD and J. E. FAHEY, Tests of Mississippi Bentonites in Tank-Mix Nicotine Bentonite Sprays for Control of the Codling Moth (Sci. Note, Apr.) 338
STEINER, L. F., C. H. ARNOLD and J. E. FAHEY, Soybean Phosphatides as Deposit-Builders in Nicotine Bentonite and Lead Arsenate Spray Mixtures for Control of the Codling Moth.....(Feb.) 70
STONE, M. W., The Effect of Winter Soil Temperatures on Emergence of Adults of the Sugar-Beet Wireworm in Cages....(Aug.) 510
SULLIVAN, W. N., MILTON S. SCHECHTER and H. L. HALLER, Insecticidal Tests with *Phellodendron amurense* Extractive and Several of its Fractions...Sci. Note (Dec.) 937
SULLIVAN, W. N., and F. M. WADLEY, A Study of the Dosage-Mortality Curve....(June) 367
SUMMERLAND, S. A., and L. F. STEINER, Codling Moth Oviposition and Fate of Eggs .....(Feb.) 72
SUMMERLAND, S. A., and L. F. STEINER, Xanthone as an Ovicide and Larvicide for Codling Moth.....(June) 435
SWAIN, R. B., Nematode Parasites of the White-Fringed Beetles.....(Oct.) 671

TATE, H. DOUGLAS, The Occurrence of the Potato Tuber Worm in Nebraska..... .....(Sci. Note, Feb.) 120
TATE, H. DOUGLAS, and LEWIS T. GRAHAM, Nebraska Cattle Grub Survey..... .....(Sci. Note, Oct.) 801
TATE, H. DOUGLAS, and ROSCOE E. HILL, Increases in Aphid Populations on Potato Plants Sprayed with Zinc Arsenite in Western Nebraska.....(Feb.) 63
TAUBER, OSCAR E., and JAMES T. GRIFFITHS, JR., Evaluation of Sodium Fluoride as a Stomach Poison and as a Contact Insecticide Against the Roach *Periplaneta americana* L.....(Aug.) 536
THOMAS, C. A., Belladonna Insects in Pennsylvania.....(Sci. Note, Aug.) 630
THOMAS, F. L., and R. K. FLETCHER, Natural Control of Eggs and First Instar Larvae of *Heliothis armigera*.....(Aug.) 557
TOFFALETI, JAMES, LOUIS ROTH, W. V. KING and WOODROW W. MIDDLEKAUFF, New Distribution Records for the Mosquitoes of the Southeastern United States During 1942.....(Aug.) 573
TRAVIS, BERNARD V., Further Tests with Thallium Baits for Control of the Fire Ant .....(Feb.) 56
TRAVIS, BERNARD V., and G. H. BRADLEY, The Distribution of Aedes Mosquito Eggs on Salt Marshes in Florida.....(Feb.) 45

TRAVIS, BERNARD V., and G. H. BRADLEY, Time-Saving Methods for Handling Mosquito Light-Trap Collections.....(Feb.) 51
TRAVIS, GERALD E., Naphthalene Paste.....(Sci. Note, June) 477
TREMBLEY, HELEN LOUISE, Derris Used for the Control of Head Lice and Pubic Lice.....(Oct.) 795
TURNER, NEELY, Reversals in Order of Effectiveness of Insecticides.....(Oct.) 725
TURNER, NEELY, The Effect of Diluents on the Toxicity of Pure Ground Derris Root in Dusts.....(Apr.) 266

UNDERHILL, G. W., Two Pests of Legumes: *Alydus eurinus* Say and *A. pilosulus* H.-S.....(Apr.) 289

VAN LEEUWEN, E. R., Chemotropic Tests of Materials Added to Standard Codling Moth Bait.....(June) 430
VANSELL, GEORGE H., The Wax Moth as a Household Pest.....(Sci. Note, Aug.) 626
VOGHT, GEORGE P., L. P. DITMAN and DWIGHT R. SMITH, Undercooling and Freezing of Insects.....(Apr.) 304

WADLEY, F. M., C. C. CASSIL and F. P. DEAN, Sampling Studies on Orchard Spray Residues in the Pacific Northwest.....(Apr.) 227
WADLEY, F. M., and W. N. SULLIVAN, A Study of the Dosage-Mortality Curve....(June) 367
WALKDEN, H. H., Cutworm and Armyworm Populations in Pasture Grasses, Waste Lands and Forage Crops.....(June) 376
WALKDEN, H. H., Differential Damage to Sweetclover Varieties by the Variegated Cutworm.....(Sci. Note, June) 470
WALKER, HARRY G., and LAUREN D. ANDERSON, Control of Aphids and Diamond-Back Moth Larvae on Collards with Rotenone-Nicotine Dusts.....(Sci. Note, Apr.) 343
WALKER, HARRY G., and LAUREN D. ANDERSON, Pea Aphid Control in Eastern Virginia in 1942.....(Apr.) 281
WALTON, W. R., John Calhoun Hamlin.....(Obituary, Oct.) 811
WATKINS, THOMAS C., and FLOYD D. MINER, Flight Habits of the Carrot Rust Flies Suggest Possible Method of Control....(Aug.) 586
WATKINS, THOMAS C., and STANLEY H. LOGAN, Reduction of Flea Beetle Injury to Tomato Transplants by Treatment Prior to Setting.....(Aug.) 584
WEISS, HARRY B., Color Perception in Insects.....(Feb.) 1
WENE, GEORGE, *Sagaritis provancheri* (D.T.) an Important Parasite of the Tobacco Budworm.....(Sci. Note, Apr.) 333
WENE, GEORGE, and C. B. DOMINICK, Abundance of *Microctonus epitricis* (Vier.) in Virginia.....(Sci. Note, Feb.) 114
WHITCOMB, W. H., and H. H. SCHWARDT, Life History of the European Chafer *Amphimallon majalis* (Razoum)....(Sci. Note, Apr.) 345
WILCOX, J., Practical Field Tests of Oils and Oils Containing Other Insecticides for the Control of the Earworm in Southern California.....(Aug.) 554
WILCOX, J., Rate of Application and Strength of Cryolite Dust Mixtures in Tomato Fruitworm Control.....(Oct.) 700
WILCOX, J., and A. F. HOWLAND, Damage to Strawberry Fruit by Small Darkling Beetles.....(Sci. Note, Feb.) 116
WILLIAMSON, AMIS L., Two Foreign Bean Pod Borers Discovered in Texas.....(Sci. Note, Dec.) 936
WOLCOTT, GEORGE N., Arthur Hinton Rosenfeld, 1866–1942.....(Obituary, Apr.) 358
WOLCOTT, GEORGE N., "Handbook of Economic Entomology for South India".....(Review, Apr.) 360
WOLCOTT, GEORGE N., William Albert Hoffman, 1894–1943.....(Obituary, June) 486
WOLCOTT, GEORGE N., and LUIS F. MARTORELL, Control of the Sugarcane Borer in Puerto Rico by Laboratory-reared Parasites.....(June) 460
WOLFENBARGER, D. O., and T. H. JONES, Intensity of Attacks by *Scolytus multistriatus* at Distances from Dispersion and Convergence Points.....(June) 399
WOOD, STEPHEN L., and GEORGE F. KNOWLTON, Utah Bird Predators of the False Chinch Bug.....(Sci. Note, Apr.) 332
WOODWORTH, C. E., Tests Using 1, 1-Dichloro-1-Nitro-ethane against Wireworms.....(Sci. Note, Apr.) 335

YARWOOD, C. E., Sulfur Dust and Hop Aphids.....(Sci. Note, Aug.) 641
YEOMANS, ALFRED H., and RANDALL LATTA, Methods and Equipment for Fumigation of Clothing Infested with Body Lice...(June) 402
YOTHERS, M. A., F. W. CARLSON, and C. C. CASSIL, Tests of 4, 6-Dinitro-o-Cresol Emulsion Against Overwintering Codling Moth Larvae.....(Dec.) 882
YOUNG, H. D., and R. T. COTTON, Acrylonitrile and Trichloroacetonitrile in Admixture with Carbon Tetrachloride as Possible Fumigants for Stored Grain.(Sci. Note, Feb.) 116
YOUNG, H. D., and R. T. COTTON, Certain Organic Bromides as Grain Fumigants.....(Sci. Note, Oct.) 796
YOUNG, H. D., and R. T. COTTON, Some Fumigants of the Nitro-paraffin Group.....(Sci. Note, Feb.) 125
YOUNG, M. T., G. L. GARRISON, and R. C. GAINES, Calcium Arsenate With and Without Cube and Nicotine for Control of the Boll Weevil and the Cotton Aphid at Tallulah, La., in 1942.....(Dec.) 901
YOUNG, T. ROY, and J. K. HOLLOWAY, Influence of Fungicidal Sprays on Entomogenous Fungi and on the Purple Scale in Florida...(June) 453
YUST, HAROLD R., Productivity of the California Red Scale on Lemon Fruits...(Dec.) 868
YUST, HAROLD R., and R. L. BUSBEY, Influence of Moisture and Field Dust on the Susceptibility of the California Red Scale to HCN.....(June) 457
YUST, HAROLD R., R. L. BUSBEY, and HOWARD D. NELSON, The Influence of Repeated Fumigation with HCN on the Susceptibility of the California Red Scale.....(Dec.) 872
YUST, HAROLD R., and ROBERT A. FULTON, An Exudation Associated with the Feeding Location of the California Red Scale.....(Sci. Note, Apr.) 346
YUST, HAROLD R., HOWARD D. NELSON, and R. L. BUSBEY, Comparative Susceptibility of Two Strains of California Red Scale to HCN, with Special Reference to Inheritance of Resistance.....(Oct.) 744
YUST, HAROLD R., HOWARD D. NELSON and R. L. BUSBEY, Influence of Inbreeding on the Susceptibility of the California Red Scale to HCN.....(Sci. Note, Apr.) 352
YUST, HAROLD R., HOWARD D. NELSON, and R. L. BUSBEY, Influence of Decreasing, Constant, and Increasing Concentrations on Results of Fumigation of the California Red Scale with HCN.....(Dec.) 875